



Global Shipping Markets

Capital Link Greek Shipping Forum

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[Maritime Research](#)

[Maritime Advisors](#)

[Supply Chain Advisors](#)

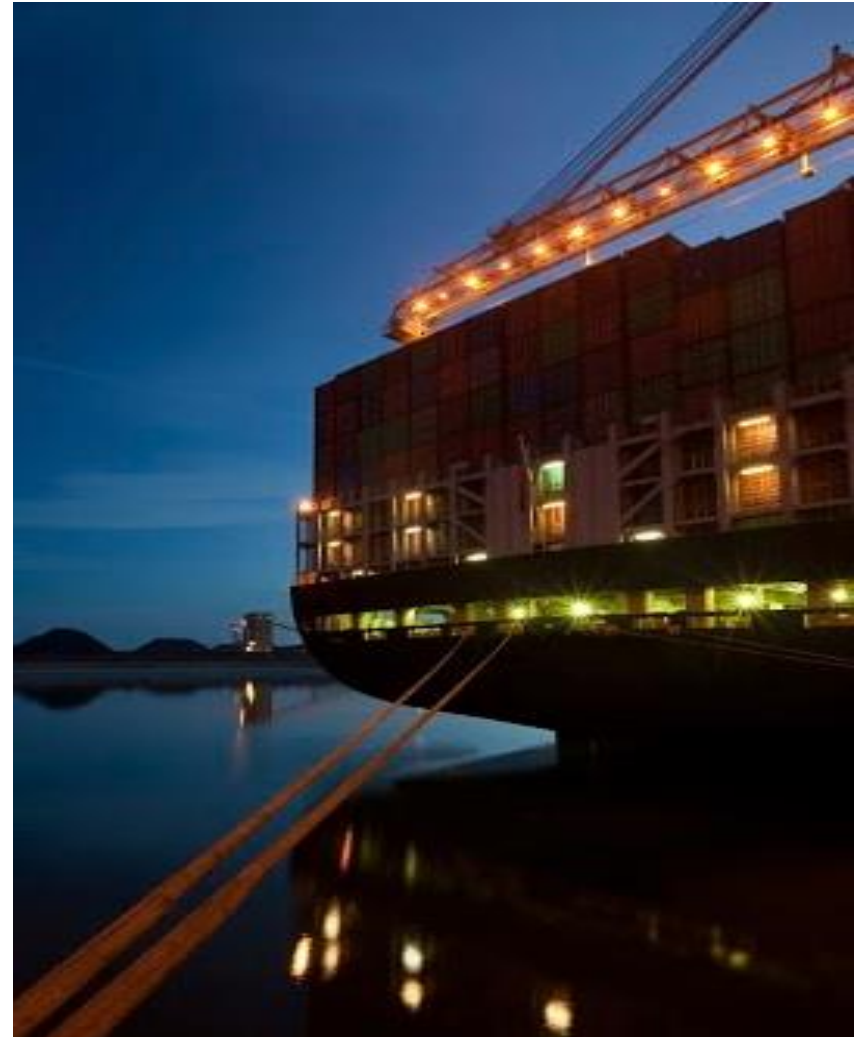
[Maritime Financial Research](#)

Welcome to Drewry

Drewry is a leading provider of research and consulting services to the maritime and shipping industry. The company has unrivalled experience and expertise across all market sectors from containers and ports to tankers and dry bulk.

From our origins in 1970 in London to a 21st century maritime and shipping consultancy, **Drewry** has established itself as one of the most widely used and respected sources of impartial market insight and industry analysis. This in-depth understanding and objectivity provides our clients with actionable advice and recommendations they need to achieve their ambitions and stay ahead of the market.

We provide our services through four business units: **Drewry Maritime Advisors** supports the needs of shipping and financial institutions; **Drewry Supply Chain Advisors** provides sea freight procurement support to retailers and manufacturers; **Drewry Maritime Research** publishes market-leading research on every key maritime sector; and **Drewry Maritime Financial Research** delivers investment research services on listed companies operating in the industry.



Our four Business Units

Maritime Research



Our research provides robust analysis and balanced opinion for those within shipping, finance and logistics who need to make informed business decisions. The range of titles and reports we publish keeps our clients up to date on every key maritime sector, from dry bulk to chemicals and from LPG to ferries, with detailed analysis and insightful commentaries on past, present and future sector performance.

Maritime Advisors



Our Maritime Advisors offer a wealth of experience across maritime sectors and lead the industry in their respective areas of specialisation. Our sector expertise covers ports, bulk shipping, liner shipping, shipyards, ferry and RoRo, and technical ship management. Our combination of deep sector understanding, technical expertise and market-leading insight increases our confidence in our actions and ability to deliver the right results for our clients.

Supply Chain Advisors



We focus on advising users of international multi-modal transport services, taking our extensive understanding of the industry and applying it to all stages of the supply chain. Through our supply chain research catalogue and industry knowledge, we offer a range of procurement support services that empower importers and exporters. Our services provide them with the tools, resources and tailored advice they need to more effectively manage their transport service provider and international supply chains.

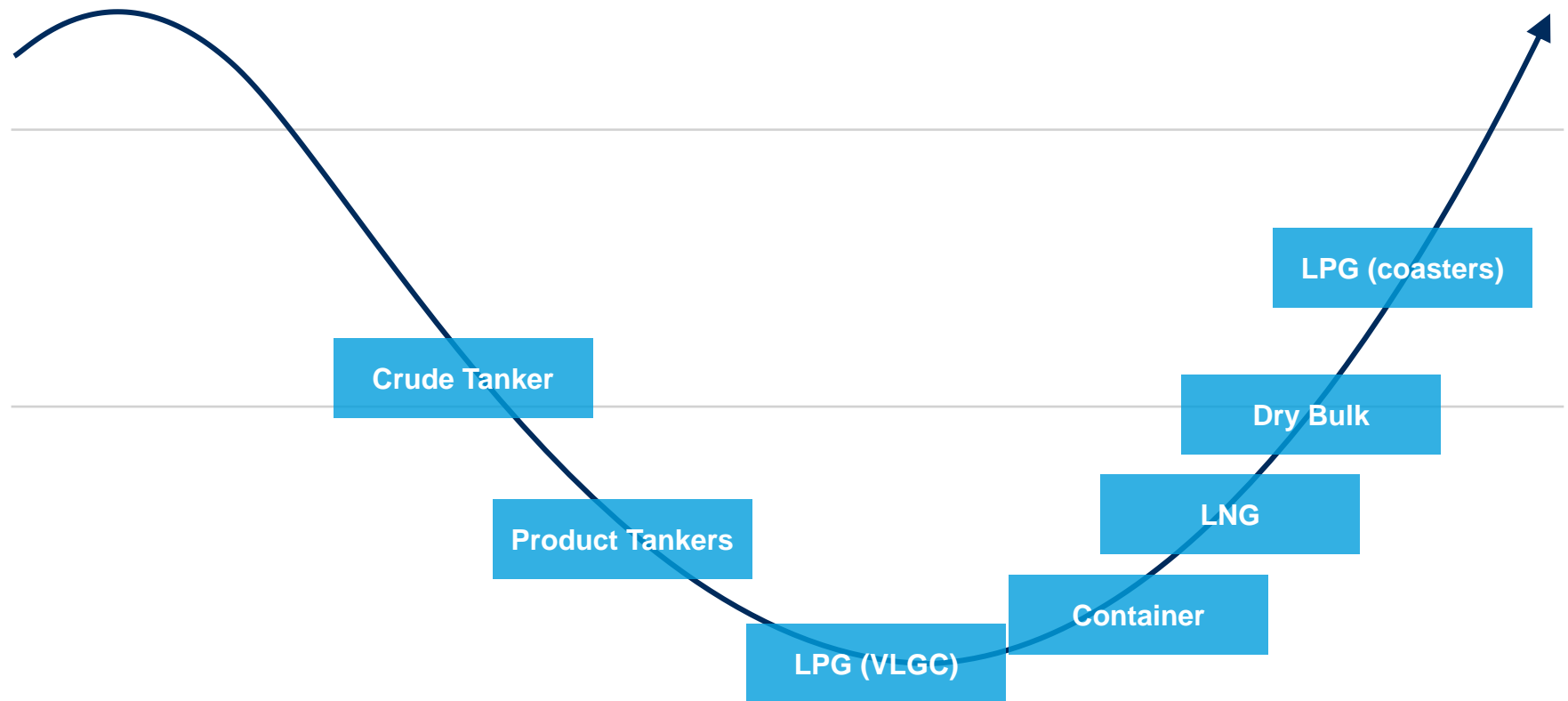
Maritime Financial Research



Combining our market-leading resources with seasoned sector expertise and commercial awareness, we are now able to offer highly differentiated and comprehensive investment research service to prospective investors in publically listed maritime and shipping companies. Our services cover a range of report formats, supporting resources and sector-orientated webinars aimed at providing our clients with a complete picture of the organisations under our coverage.

Cyclicality in shipping sectors

Recovery in LPG, Dry Bulk to continue



Source: Drewry research

Dry bulk shipping

Container shipping

Crude tankers

Product tankers

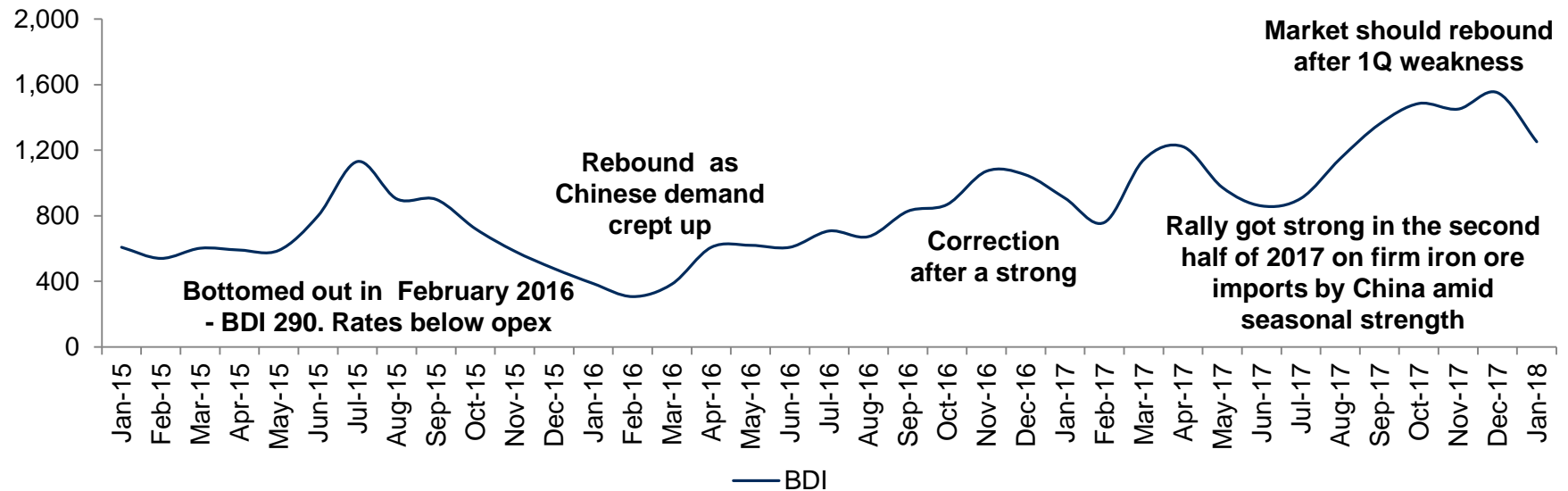
LPG shipping

LNG shipping

Dry bulk shipping

Fragile recovery

Baltic dry Index (BDI)



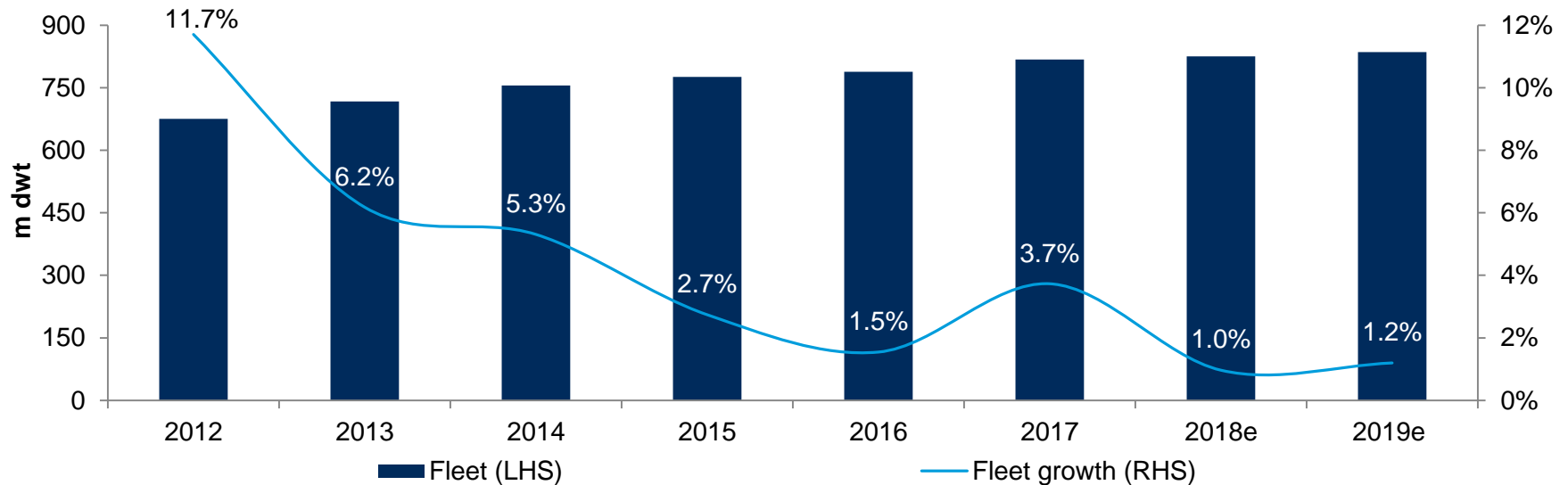
Source: Bloomberg, Drewry research. Based on monthly average

- Strong recovery following the dip in 2016
- Recovery sputters as China cuts steel production in winter
- Demand expected to pickup after the 1st quarter

Dry bulk shipping

Benign fleet growth in 2018 and 2019

Dry bulk fleet growth



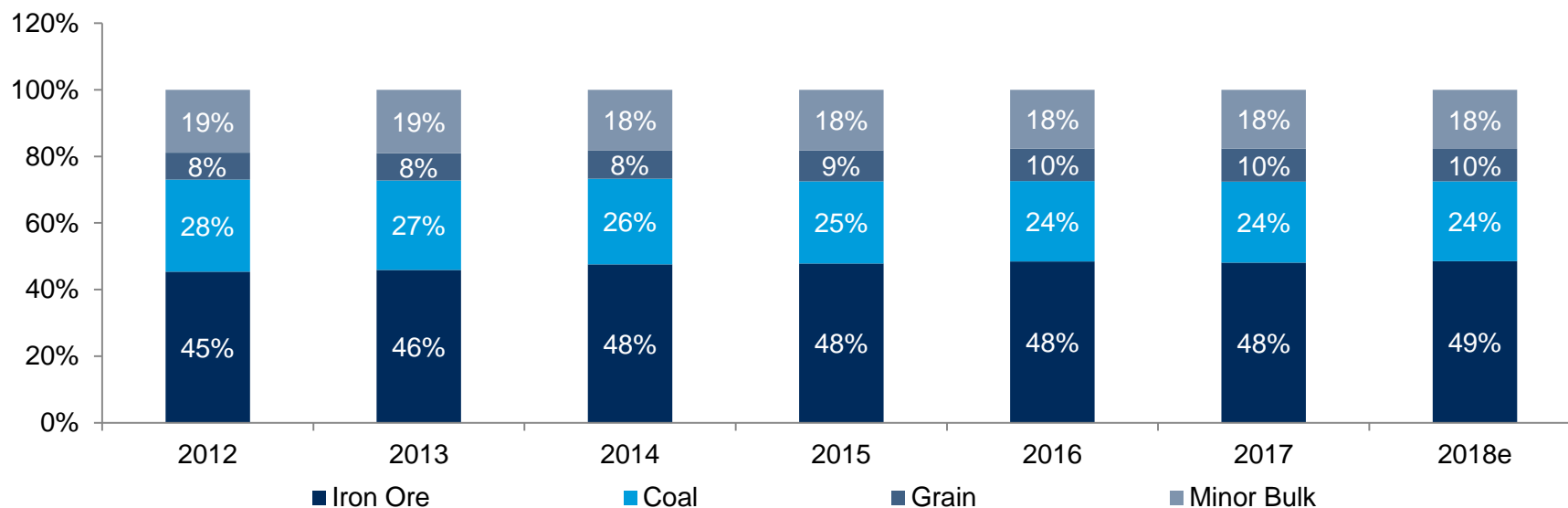
Source: Bloomberg, Drewry research

- Dry bulk fleet growth of 1% compared to 3.7% in 2017
- We forecast 23m dwt actual fleet growth in 2018 (adjusting for slippage)
- Orderbook stands at 9.9% of the current fleet

Dry bulk shipping

Drybulk shipping demand – iron ore remains the mainstay

Dry bulk tonne-mile demand by commodity



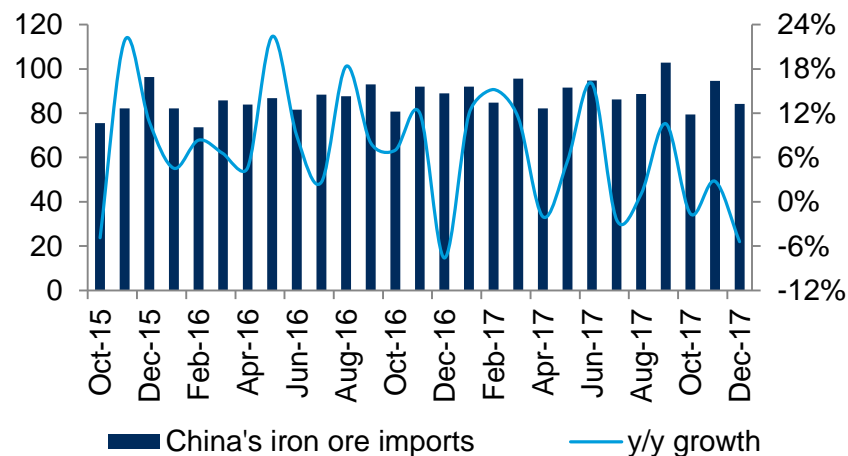
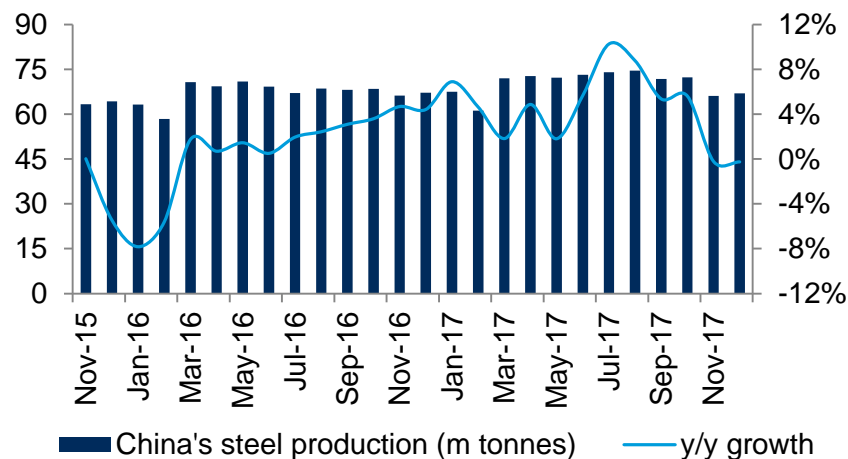
Source: Drewry research

- Iron ore main tonne mile demand driver with share increasing to 49%
- Coal share declined to 24%
- Minor bulk and grain trade steady

Dry bulk shipping

China's iron-ore imports to moderate

Chinese steel production and iron-ore imports to be lower in 2018



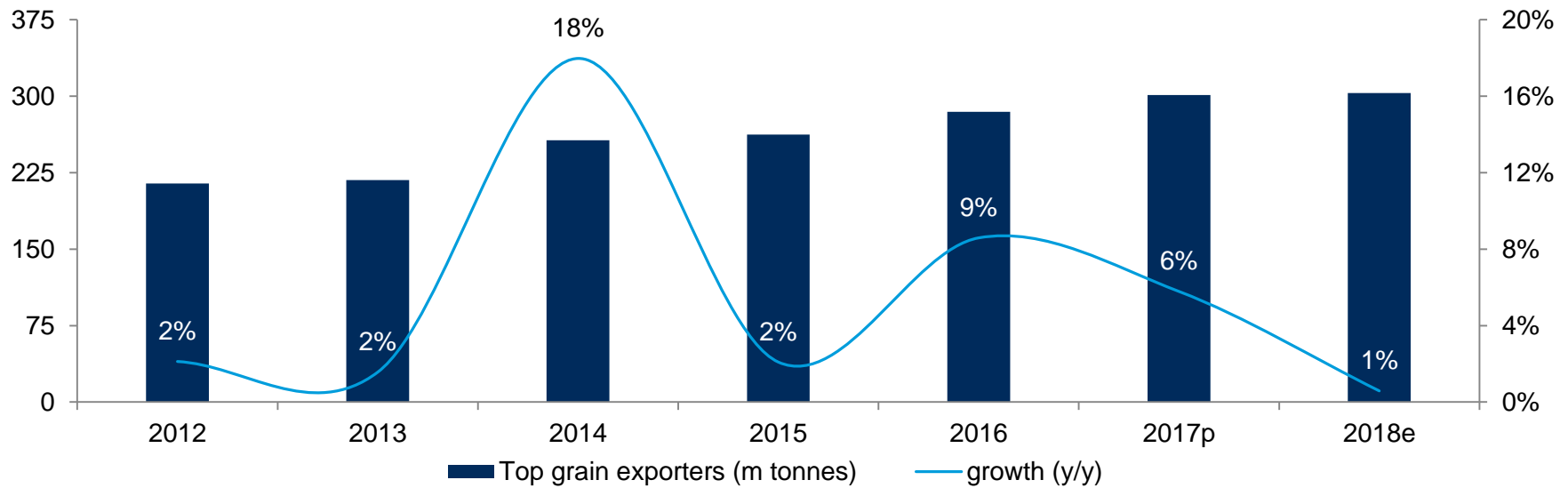
Source: Bloomberg, Drewry research

- 28 cities accounting for 30% of China's steel production offline from November'17 to March'18.
- This reduction is likely to result in 3-4% iron ore import growth in 2018, down from 6% import growth in 2017.
- China iron ore imports flatten

Dry bulk shipping

Grain trade growth expected to slow in 2018

Higher grain exports to support smaller vessels



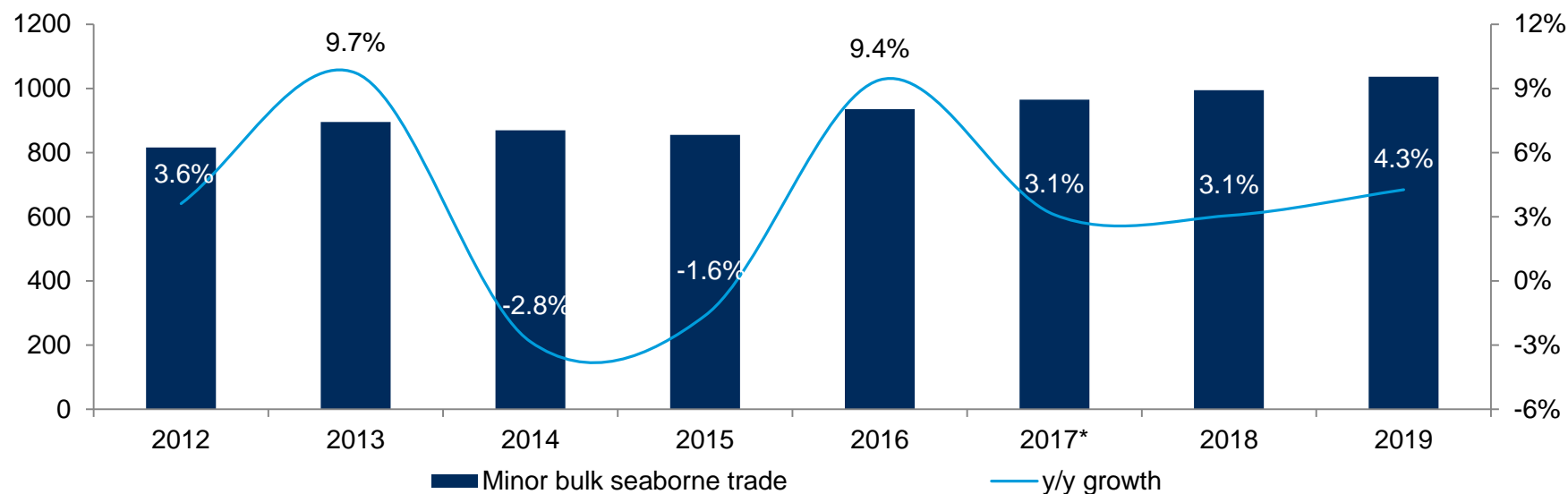
Source: Bloomberg, Drewry research

- Over the last two years, Asia and the Middle East drove strong growth in grain trade
- Grain trade growth expected to moderate in 2018

Dry bulk shipping

Minor bulk trade to remain firm in 2018/19

Growth in minor bulk trade to be steady



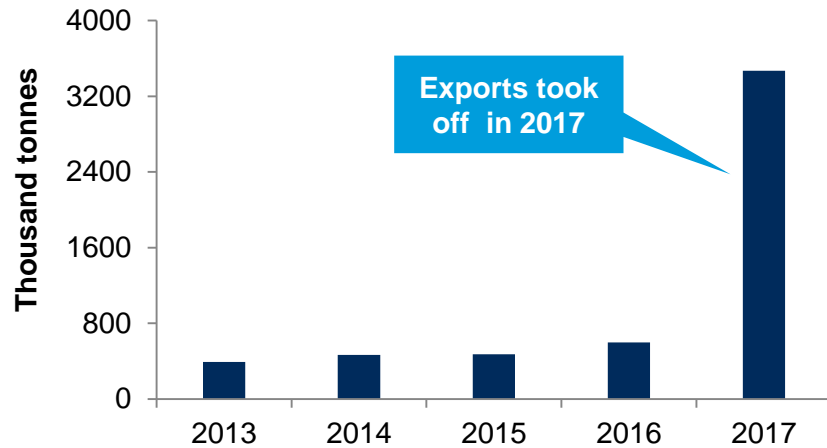
Source: Bloomberg, Drewry research

- Growth in Soybean, Bauxite, Nickel etc trade to support small bulk segment
- Increased long haul trades for minor bulk commodities such as US/ China, Brazil/ China, Guinea/ China

Dry bulk shipping

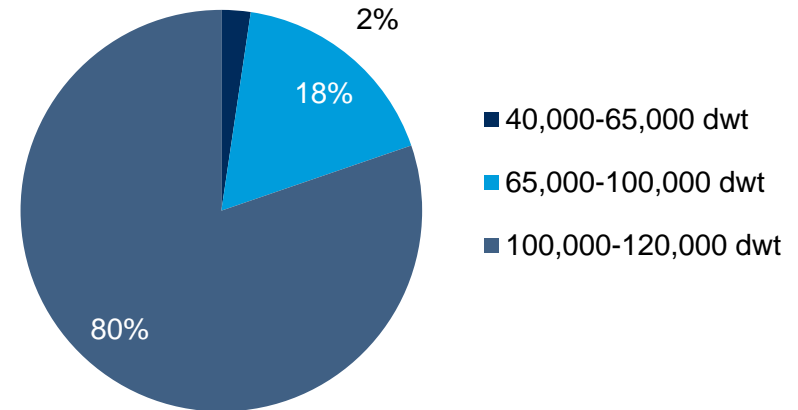
Spodumene trade

Australia's spodumene exports



Source: GTIS, Drewry research

Share of vessel (in dwt) in port headland's spodumene export

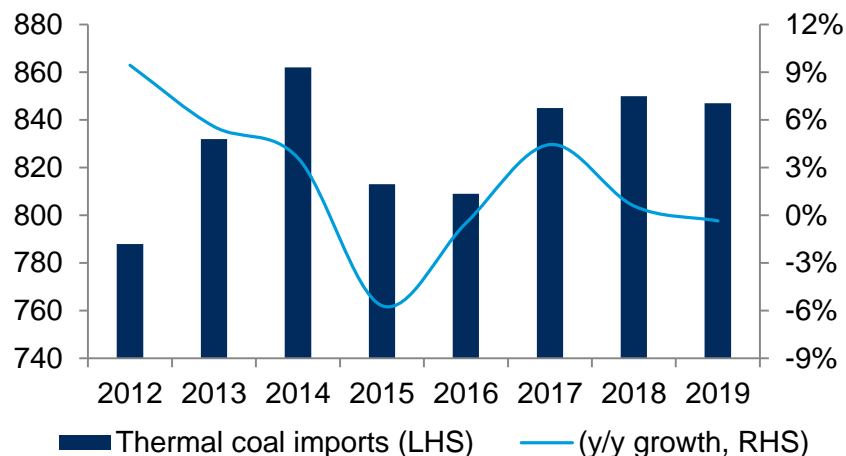
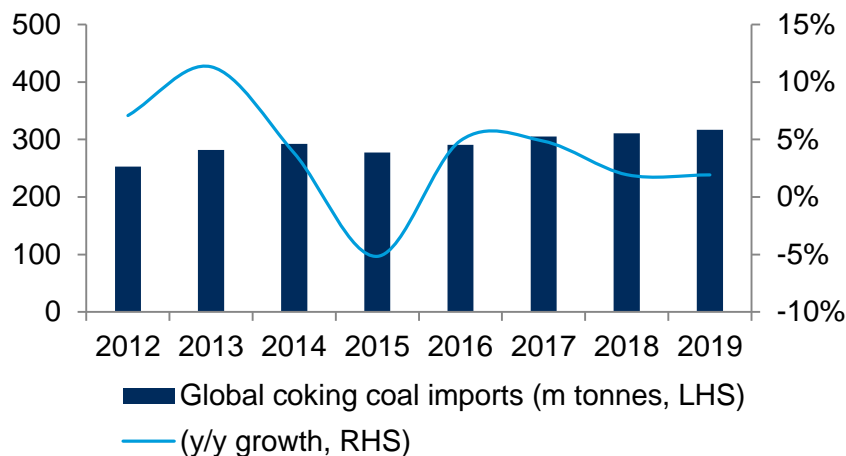


- Sixfold increase in Australian Spodumene exports
- Spodumene used for producing Lithium batteries
- China aims to manufacture 2 million electrical vehicles by 2020

Dry bulk shipping

Coal trade to moderate on lower import growth by Asian countries

Global coal imports



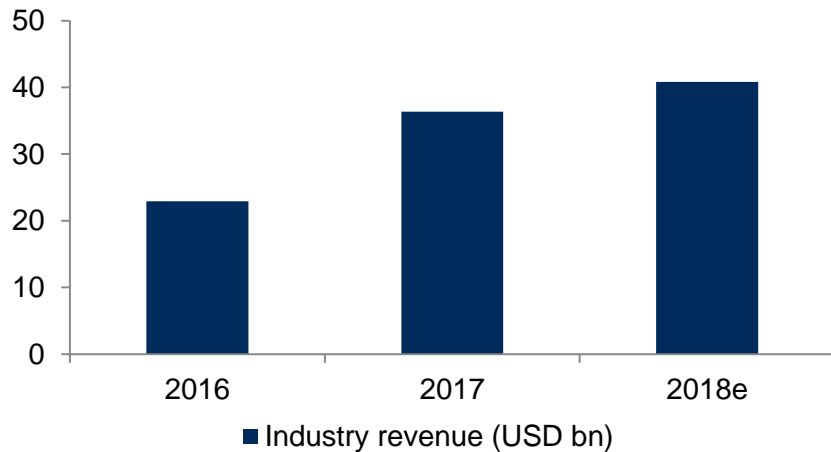
Source: Bloomberg, Drewry research

- Thermal coal imports trade expected to moderate
- Switch to renewables and LNG
- Increased domestic production in India

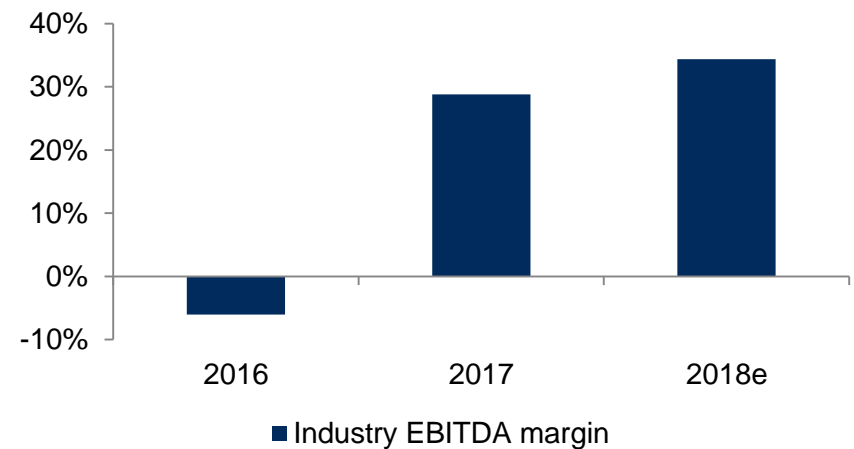
Dry bulk shipping

Industry profitability to increase

Revenue to increase but at lower pace than in 2017



Profitability to enhance further in 2018



Source: Bloomberg, Drewry research

- Industry EBITDA expected to increase from 30% in 2017 to 35% in 2018
- Smaller vessels to benefit from higher utilization

Dry bulk shipping

Container shipping

Crude tankers

Product tankers

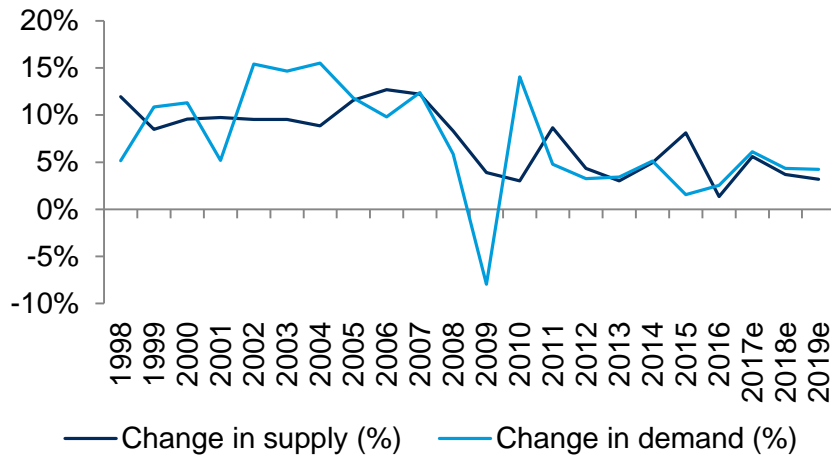
LPG shipping

LNG shipping

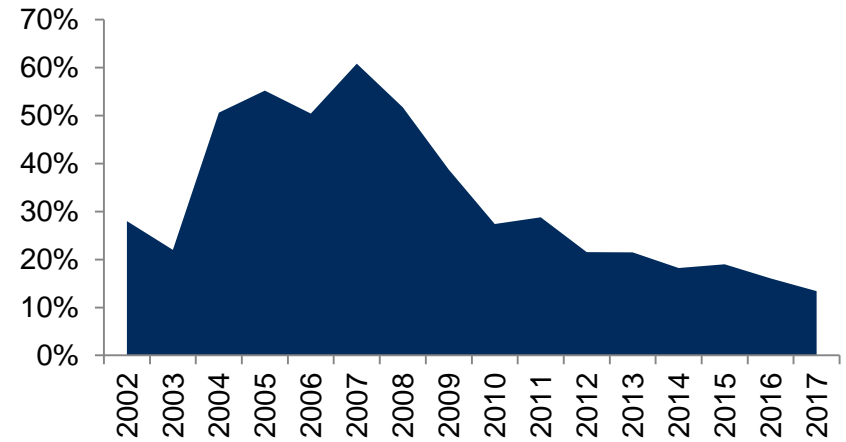
Container shipping

Orderbook to fleet ratio at historical low

Supply-demand gap has narrowed



Order book-to-fleet at historical lows



Source: Drewry research

- Supply to marginally exceed demand growth
- Orderbook at a record low of 13.4%
- Front-loaded delivery schedule to dampen near term rate increases

Container shipping

Capacity growth skewed to larger vessel sizes

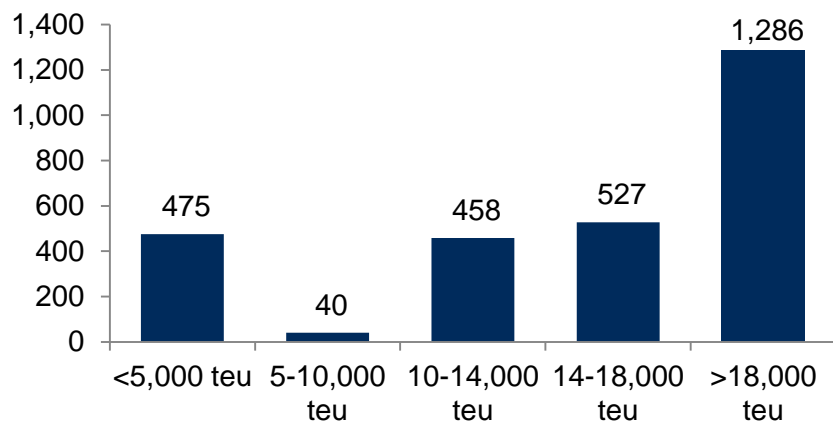
- 5.6% fleet growth in 2018
- Capacity skewed to >10k TEU
- Number of vessels greatest in <5k TEU

Adjusted global containership orderbook ('000 teu)

	2015	2016	2017	2018F	2019F	2020F
Scheduled delivery*	1,889	1,321	1,540	1,965	1,450	1,279
Less slippage	171	432	303	491	290	128
Less cancellations	0	0	0	0	0	0
Delivery Total	1,718	889	1,237	1,474	1,160	1,151
Scrapping	193	654	400	315	340	430
Total global fleet	19,735	19,970	20,807	21,966	22,786	23,507
% orderbook delivered	90.9%	67.3%	80.3%	75.0%	80.0%	90.0%
Fleet growth	8.4%	1.2%	4.2%	5.6%	3.7%	3.2%
Future orders			0	50	500	500

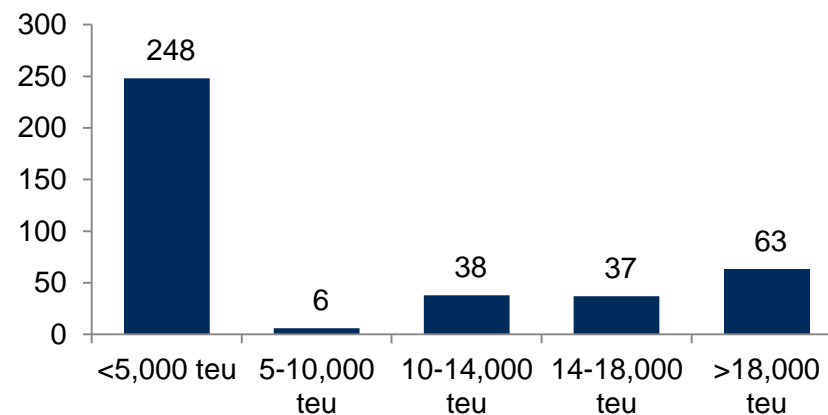
Source: Drewry research, Data as of 1 Oct 2017

Containership deliveries by size ('000 teu)



Source: Drewry research, Data as of 1 Jan, 2018

Containership deliveries by no of vessels

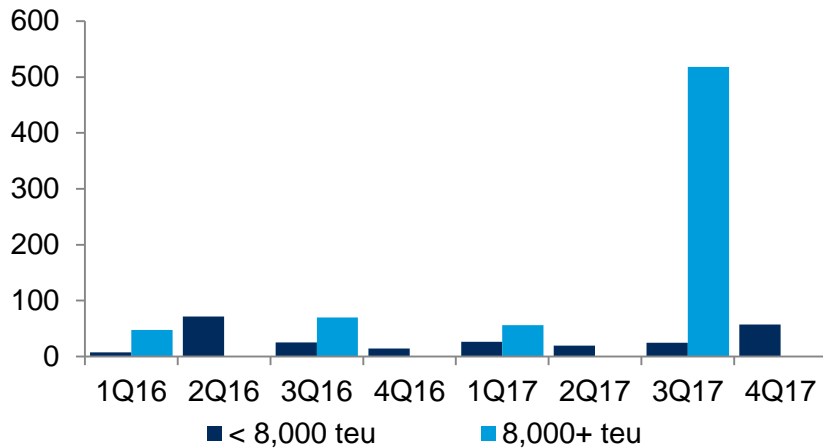


Source: Drewry research, Data as of 1 Jan, 2018

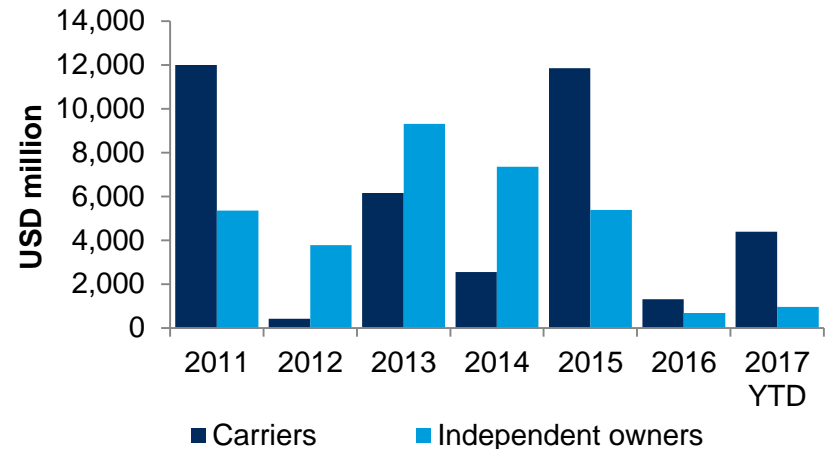
Container shipping

Carriers make significant investments in newbuildings

Recent orders by vessel size ('000 teu)



Industry investment in new builds (USD million)



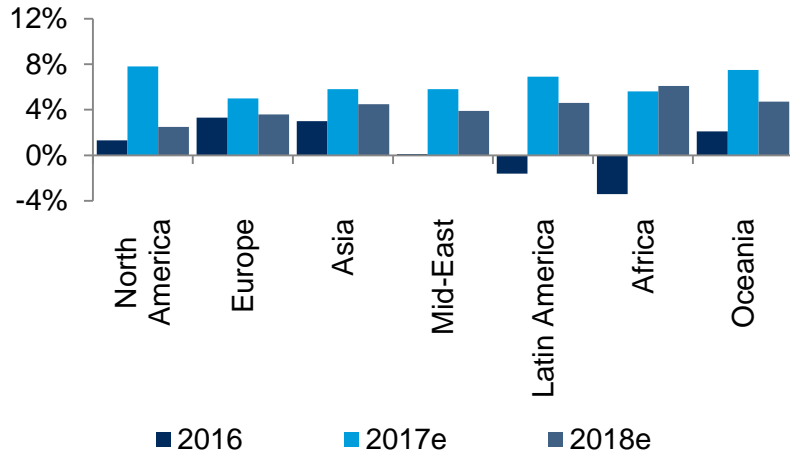
Source: Drewry research, Various
* 2017 data to Nov 2017

- 3rd quarter 2017 most profitable for the liner industry in the past seven years. All major carriers barring HMM posted a profit.
- Profits ploughed back into new vessel orders
- Orders predominantly in the ultra large vessel segment
- Most recent orders are from carriers rather than independent owners

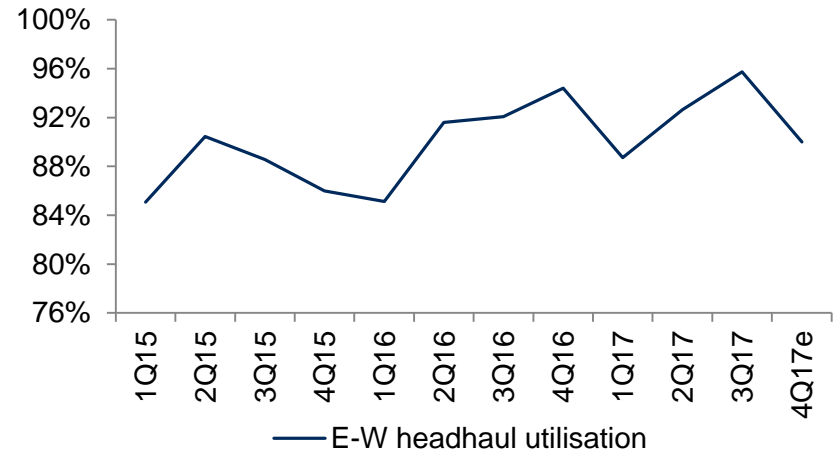
Container shipping

Load factors and port throughput should remain healthy

Port throughput growth is expected to be positive on all trade lanes



Load factor on East-West trade remains at comfortable level



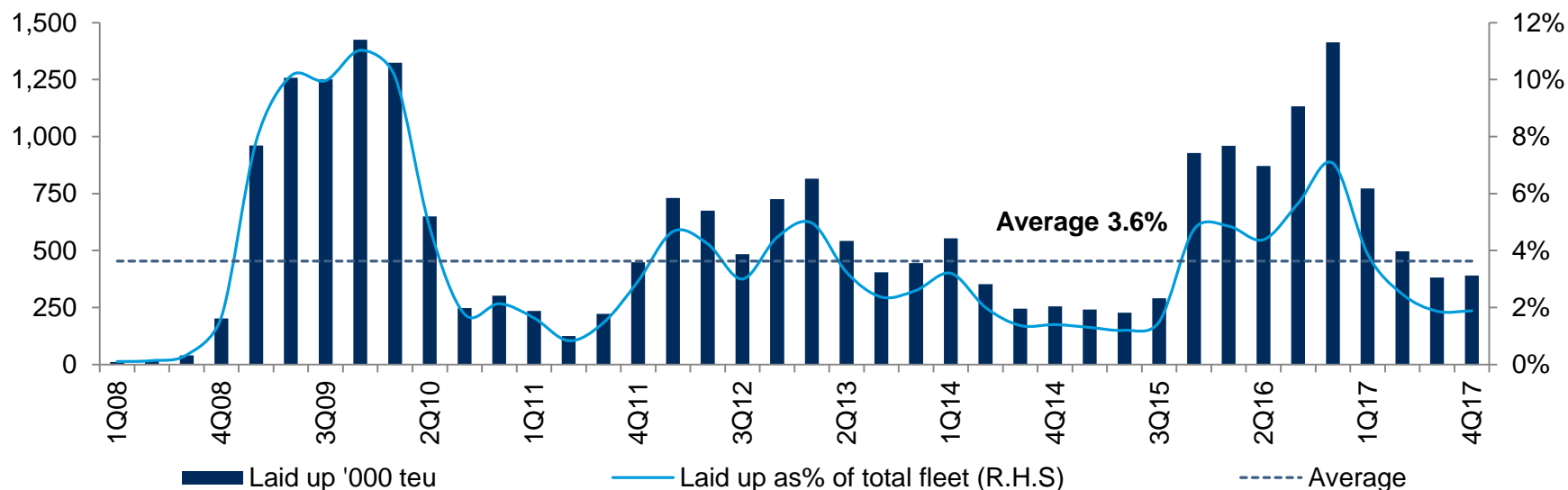
Source: Drewry research

- Port throughput grew 6% or 42m TEU in 2017
- Growth expected to moderate in 2018
- East-West head-haul ship utilization continuing upward trend

Container shipping

Fewer idle vessels indicate buoyancy in demand

Lower than average idle fleet



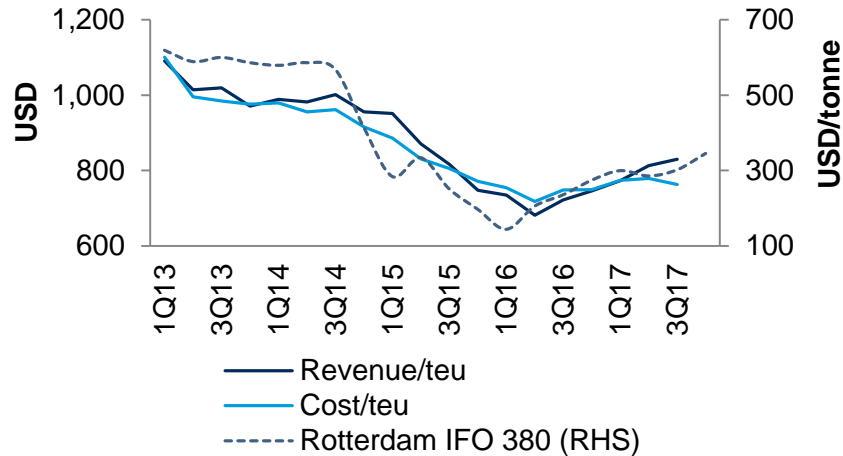
Source: Drewry research

- Idle fleet down from 1.4m TEU after Hanjin to 500,000 TEU today
- 54 idle ships reactivated from September to December 2017
- Reactivated ships mainly deployed on short term charter and so could find their way back to the idle vessel list if demand growth stagnates

Container shipping

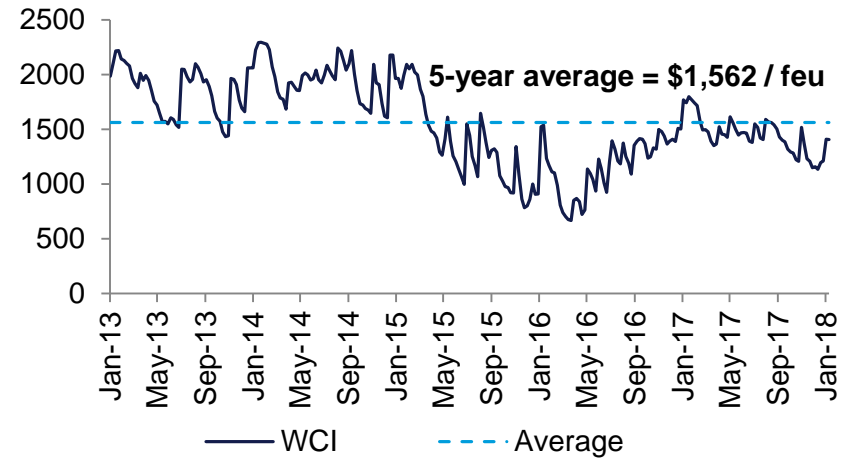
However, the risk of another price war remains...

Estimated industry freight rates, unit costs (USD)



Source: Drewry research

WCI spot rates assessed by Drewry (USD / 40ft container)



Source: WCI spot rates (assessed by Drewry), Drewry research

- Revenue increases may lag bunker price increases
- World Container Index (WCI) below 5 year average despite high utilization
- More consolidation needed

Dry bulk shipping

Container shipping

Crude tankers

Product tankers

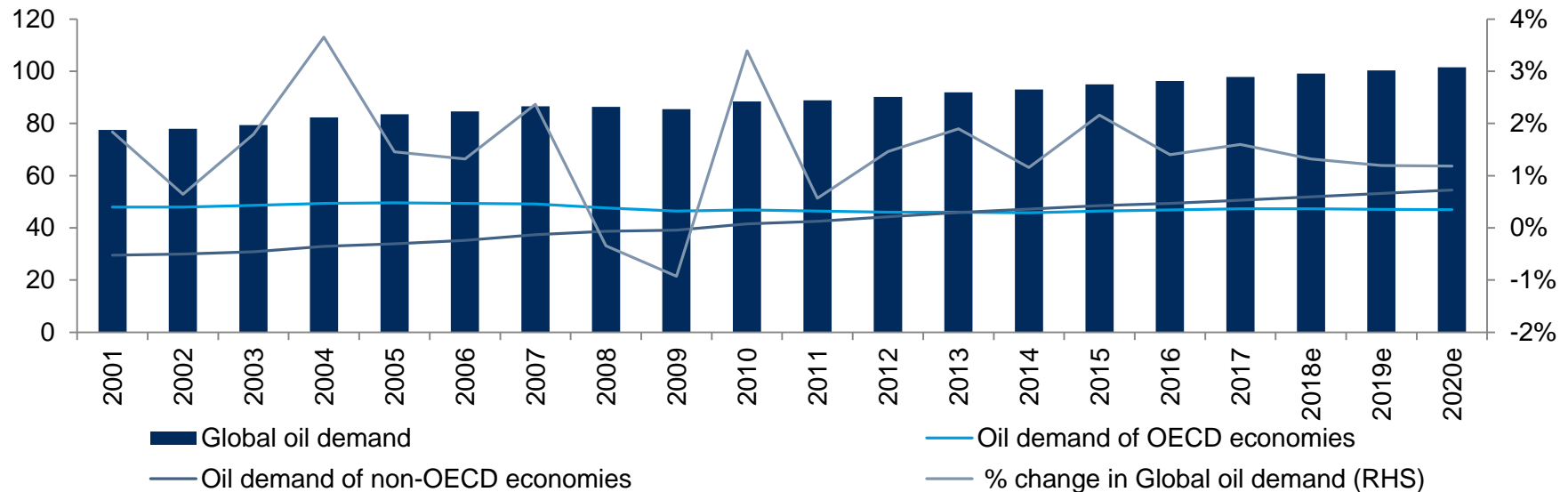
LPG shipping

LNG shipping

Crude Tankers

Asian countries to drive global crude oil demand

Global crude oil demand (mbpd)



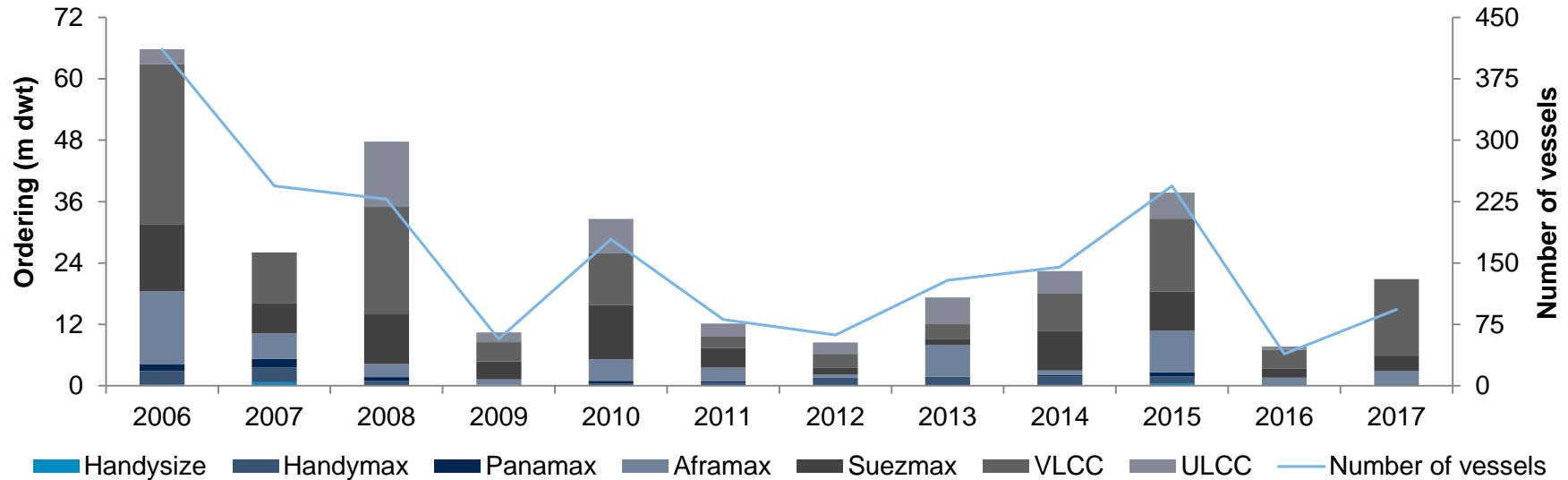
Source: Bloomberg, Drewry research

- Consumption expected to grow 1.3 mbpd in 2018
- Upcoming Asian refineries expected to drive tonne mile demand growth
- Contango and resumption of stocking activity can boost vessel demand

Crude Tankers

Increased ordering activity

Increased ordering activity could prolong an already weak tanker market



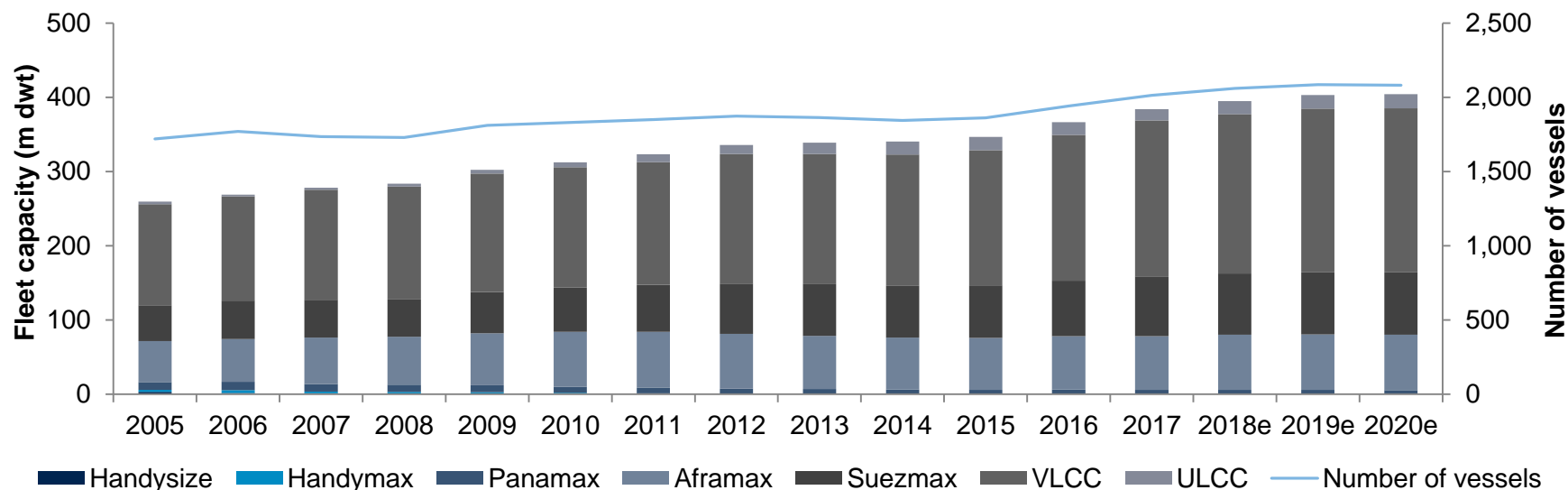
Source: Drewry research

- Elevated ordering accompanied strong market in 2015
- Reduced stocking and OPEC production cuts hurt demand
- Ordering in 2017 will prolong current slump

Crude Tankers

Fleet expansion continues

Spate of newbuilding deliveries to outpace the demand growth



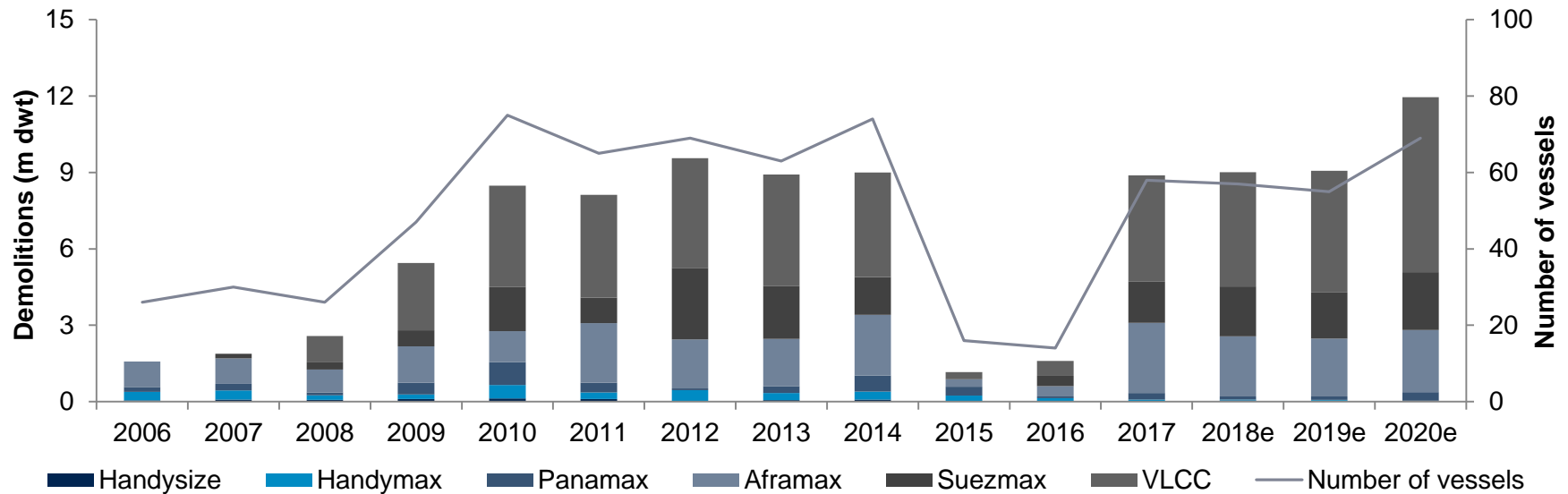
Source: Drewry research

- 4.8% fleet expansion - 49 VLCCs, 50 Suezmaxes and 31 Aframaxes delivered in 2017
- 35 VLCCs, 16 Suezmaxes and 40 Aframaxes to be delivered in 2018. Tonne mile demand to grow 1.8% against 2.7% tonne mile supply growth.
- 242 vessels comprising 12.5% of the current fleet on the orderbook

Crude Tankers

Rise in demolition could accelerate recovery

Demolitions to increase in weak tanker market



Source: Drewry research

- 58 crude tankers of 8.9mdwt demolished in 2017
- We project 9mdwt to be scrapped annually in 2018 and 2019
- Scrapping expected to accelerate to 12mdwt in 2020

Dry bulk shipping

Container shipping

Crude tankers

Product tankers

LPG shipping

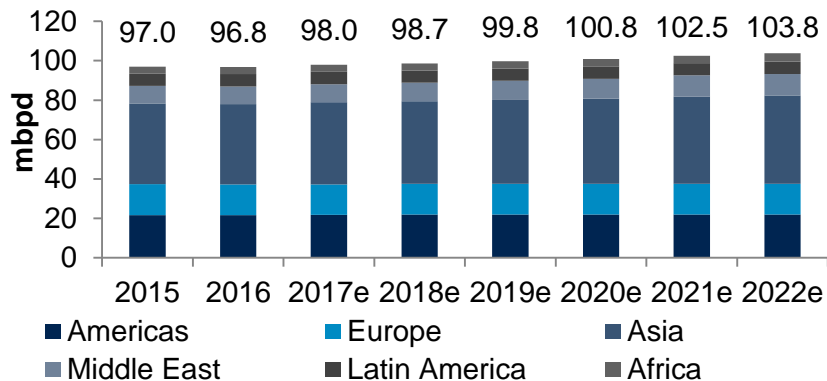
LNG shipping

Product Tankers

Structural changes on the horizon

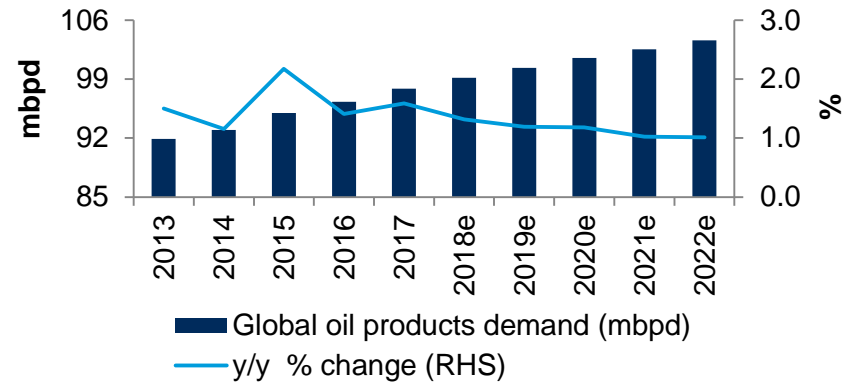
- Increased vehicle efficiency, adoption of electrical vehicles and the switch from diesel to natural gas for power generation to dampen growth
- 1-1.5% annual product demand growth
- Asian refineries to boost MRs
- Mid-east refineries to boost LRs

Planned refining capacity 2015-22 (mbpd)



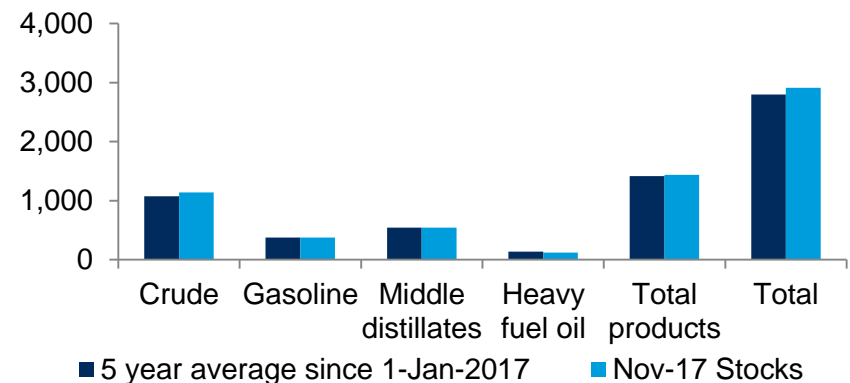
Source: IEA, Drewry research

Global oil product demand



Source: IEA, Drewry research, Note: Oil products include Naphtha, gasoline, jet fuel / kerosene, Gasoil / fuel oil and other oil products

OECD commercial stocks (million barrels)

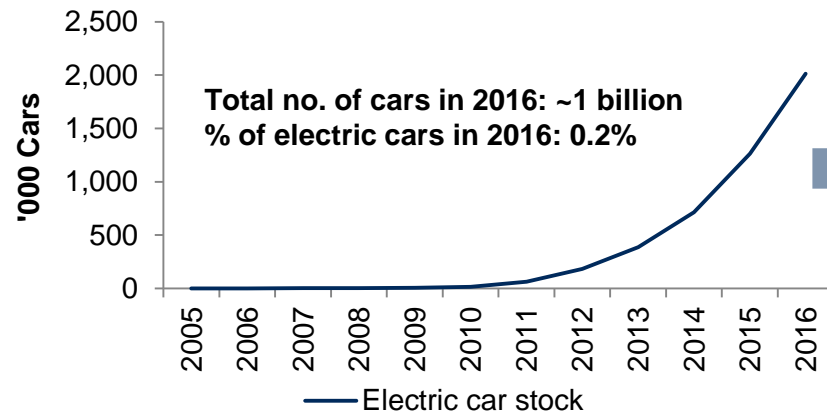


Source: IEA

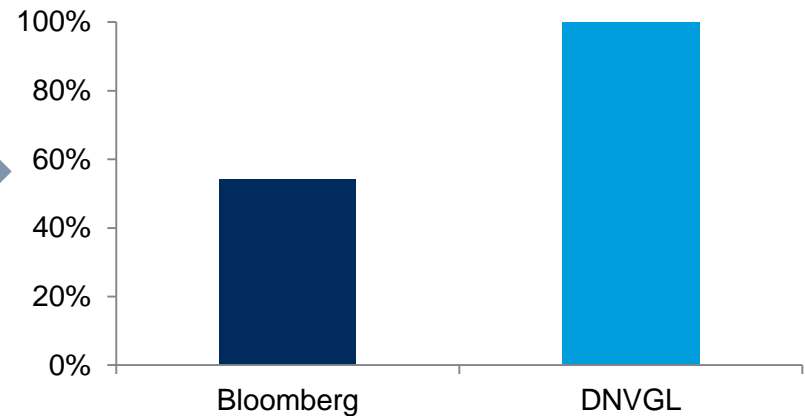
Product Tankers

Electrical vehicles to rule the road

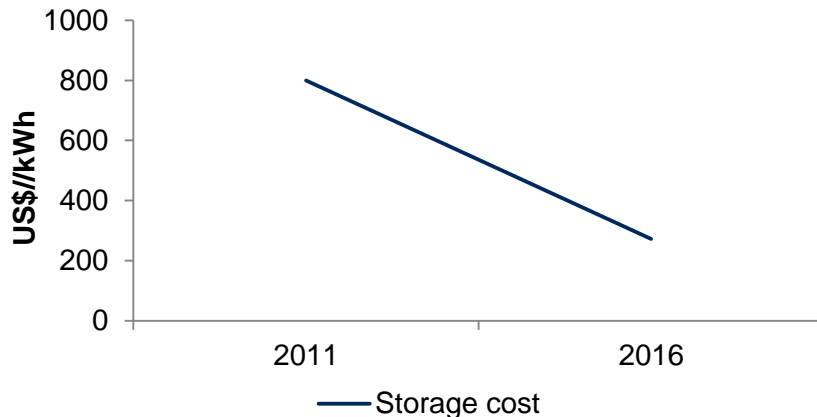
Growth in electric car



Expected market share of electric vehicles: 2040s



Fall in battery cost



- Electric vehicles usage expected to grow exponentially over the next decade.
- Cost of EVs expected to be competitive by the mid 2020s
- Usage of the internal combustion engine under threat

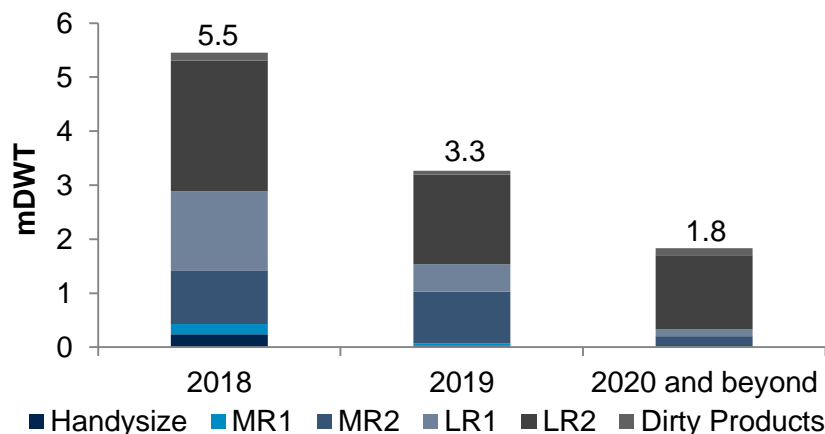
Source: IEA, DNVGL

Product Tankers

Tonnage overhang to continue till 2019

- 55 vessels delivered in 2017
- 81 vessels of about 5.5mdwt expected to be delivered this year
- Tonnage supply likely to keep rates suppressed
- 30% increase in Chinese product export quote positive for MR demand
- Increased Latin American and African demand

Product tanker overbook delivery schedule



Source: Drewry research, **Includes only non-IMO class coated tankers

Product tanker fleet and orderbook (at end-4Q17)

Size (dwt)	Fleet		Orderbook		
	No.	mdwt	No.	mdwt	% fleet
Clean Products					
10-25,000	228	3.3	16	0.3	8.2%
25-40,000	150	5.1	6	0.2	4.4%
40-55,000	453	21.1	44	2.1	10.1%
55-80,000	326	23.9	29	2.1	8.8%
80-120,000	296	32.4	44	5.0	15.3%
120,000+	3	0.5	3	0.5	100.0%
Dirty Products					
55-80,000	77	5.3	5	0.3	6.5%
Total	1,533	91.7	147	10.6	11.5%

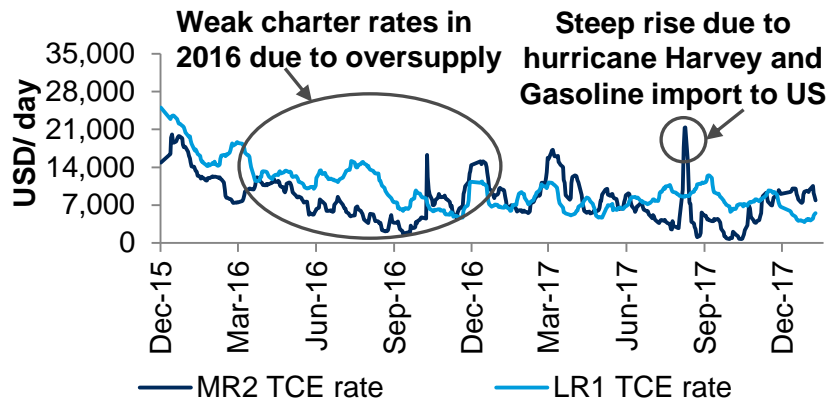
Source: Drewry research, **Includes only non-IMO class coated tankers

Product Tankers

Charter rates under pressure

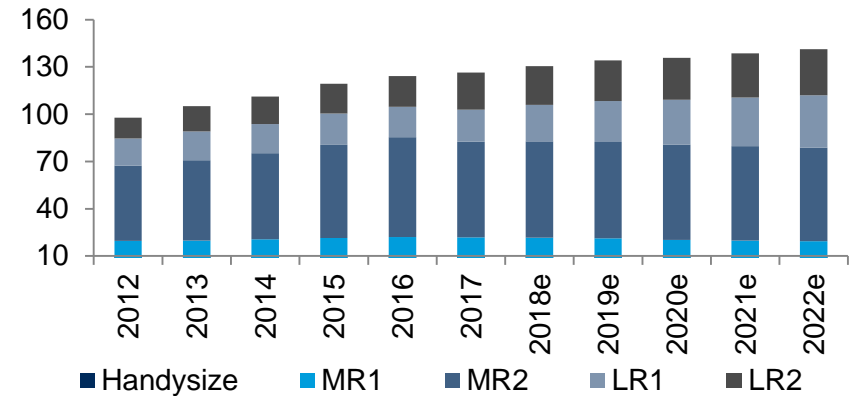
- Tonne mile demand growth of 2.3% vs tonne mile supply growth of 2.9%
- Utilization expected to decline

TCE rate for MR2 and LR1



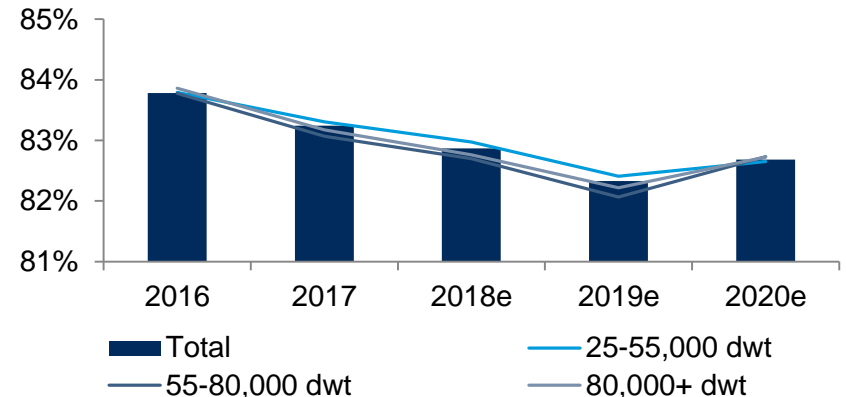
Source: Baltic Index, Drewry research

Overall product tanker fleet by trading status (mdwt)



Source: Drewry research

Product Tanker Utilisation



Source: Drewry research

Dry bulk shipping

Container shipping

Crude tankers

Product tankers

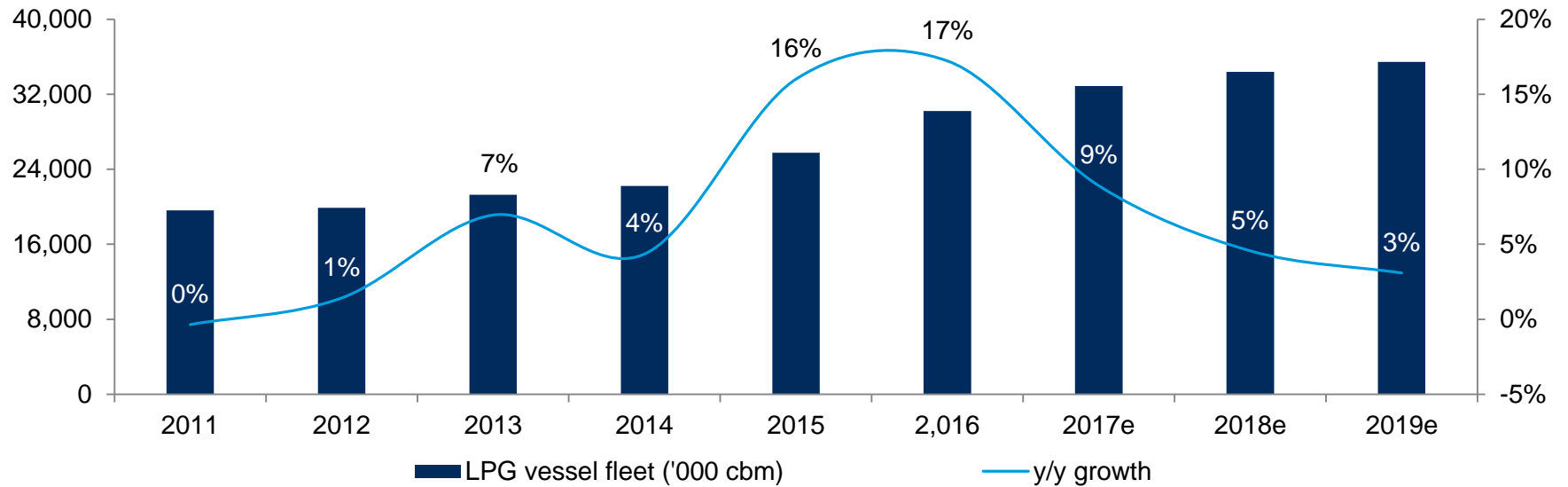
LPG shipping

LNG shipping

LPG shipping

Fleet growth moderates in 2018/2019

LPG fleet growth forecast



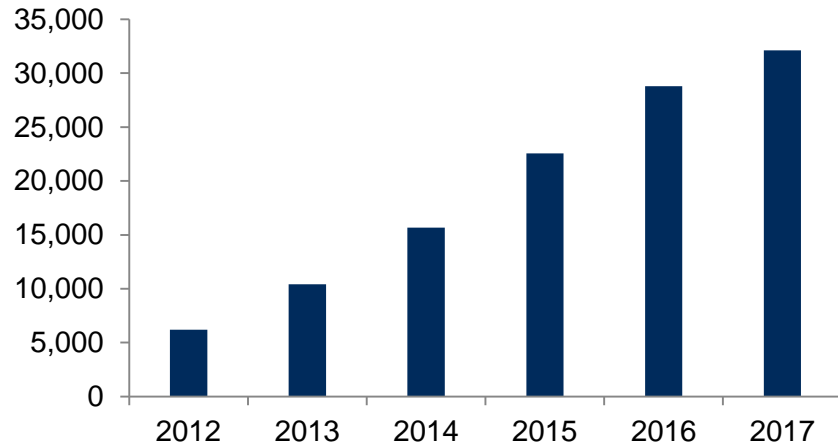
Source: Drewry research

- Delivery pace expected to decline to 5% in 2018 after peaking at 17% in 2016

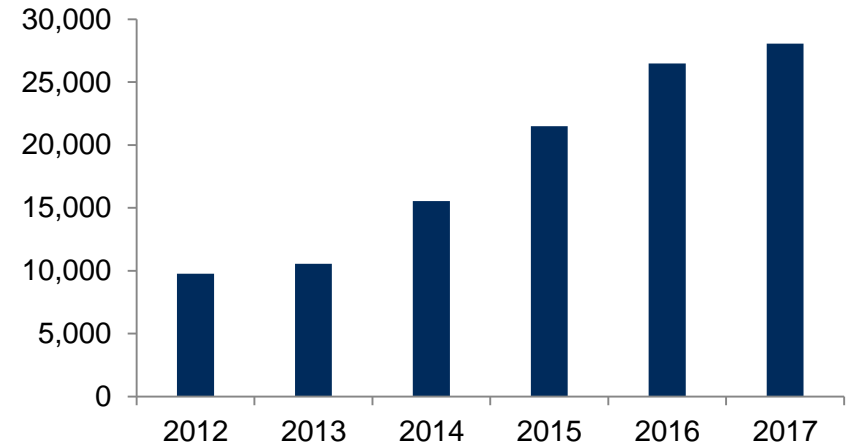
LPG shipping

US exports and Asian imports are the key demand drivers

US LPG exports ('000 tons)



China/India's LPG imports ('000 tonnes)



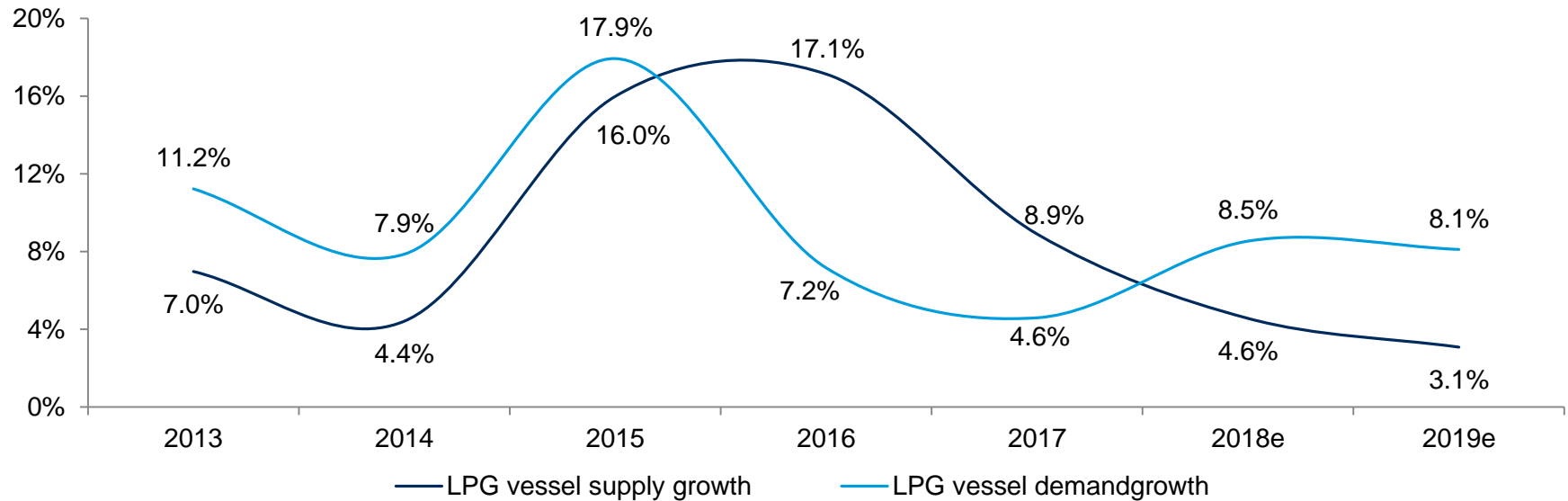
Source: Drewry research

- US LPG exports increased 39% per year from 2012 to 2017
- Firm demand from India and China
- Arbitrage trades resuming

LPG shipping

Lower tonnage growth and improving demand prospects

LPG vessel supply and demand growth



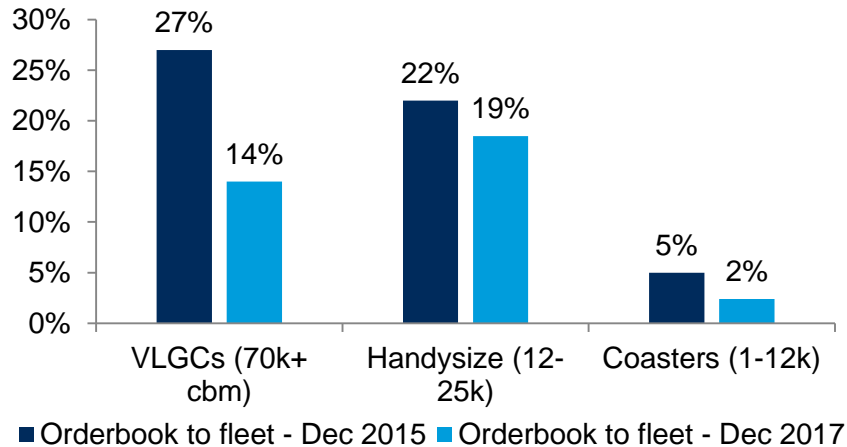
Source: Drewry research

- Vessel demand expected to increase 8.5% in 2018 against supply growth of 4.6%
- Industry profitability should gradually improve

LPG shipping

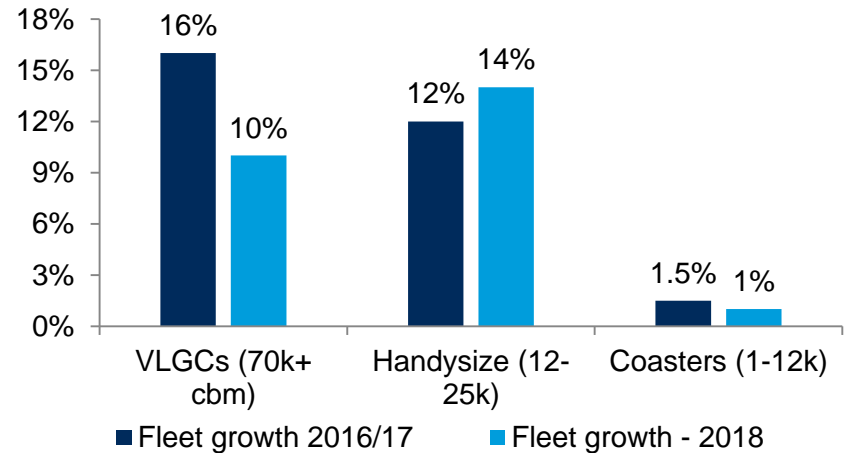
Outlook improving though varies across sub-segments

Orderbook has declined sharply since 2015



Source: Drewry research

Fleet growth to moderate in 2018



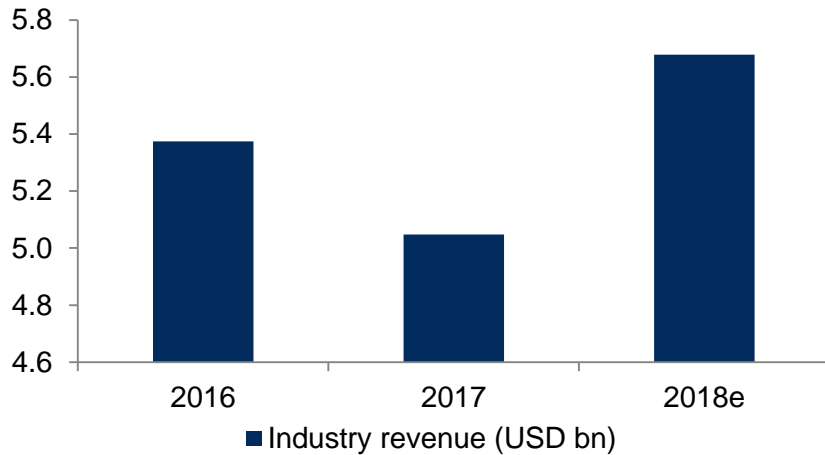
Source: Drewry research

- VLGC rates expected to gradually recover as supply challenges wane
- Handysize rates expected to be bogged down by supply and muted petrochemical trade growth
- Coasters expected to outperform given strong demand supply fundamentals

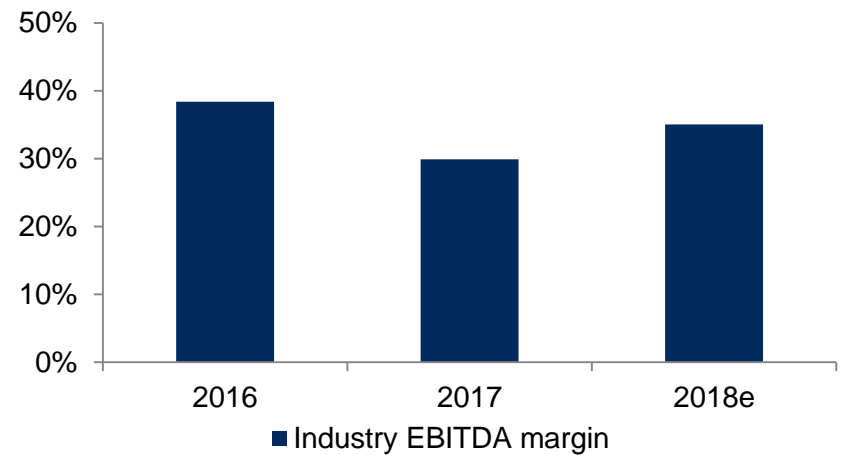
LPG shipping

Profitability expected to improve

Higher rates to expand industry revenues in 2018



Profitability to improve over last year



Source: Drewry research

- Industry profitability expected to improve in 2018, albeit but still lower than 2016
- Average industry EBITDA margin expected to rise from 30% in 2017 to 35% in 2018

Dry bulk shipping

Container shipping

Crude tankers

Product tankers

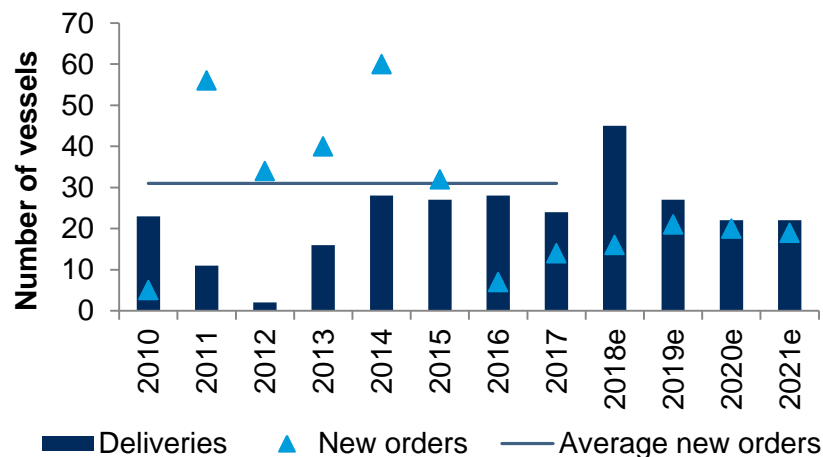
LPG shipping

LNG shipping

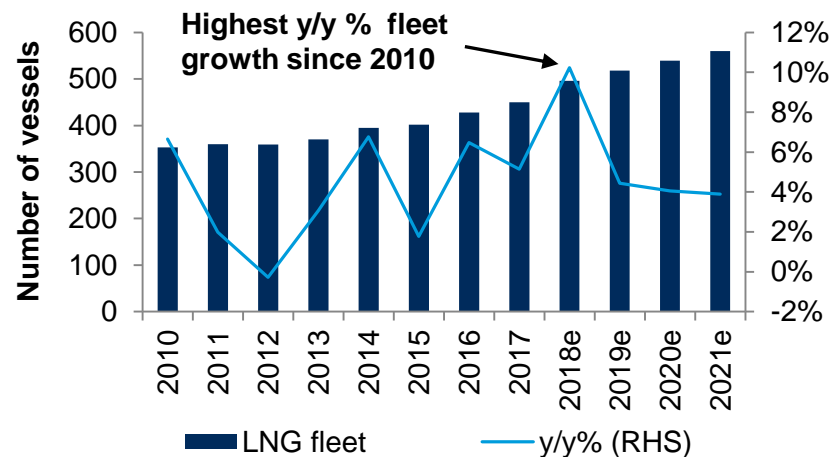
LNG shipping

Deliveries to keep market in balance

LNG fleet deliveries and New orders



LNG fleet development



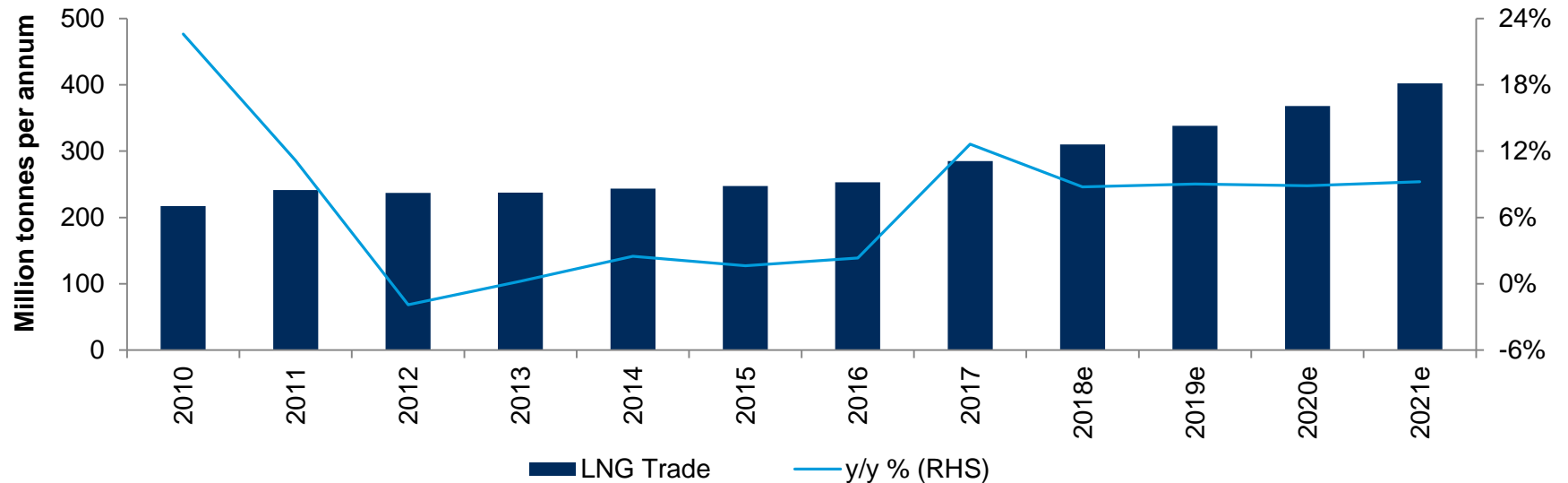
Source: Drewry research, Note – Average new orders represents average of new orders between 2010 and 2017

- Highest percentage fleet growth since 2010.
- Fleet growth expected to moderate from 2019.

LNG shipping

Brisk growth in LNG trade expected to continue

Global LNG trade (million tonnes)



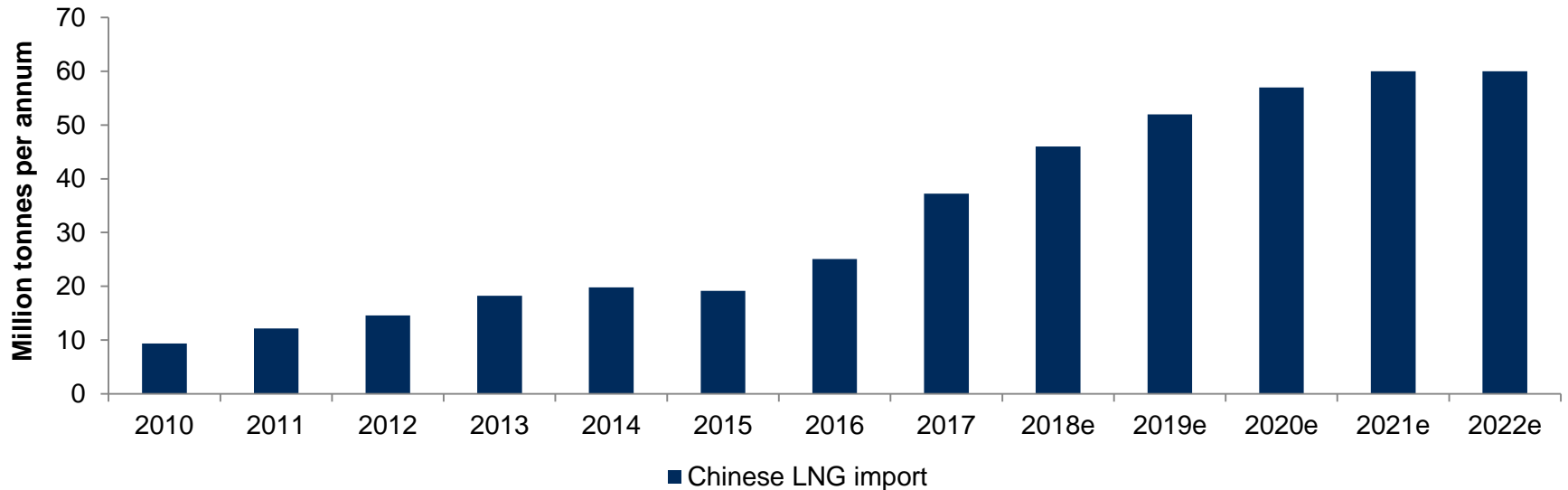
Source: Drewry research

- 9% growth in seaborne trade for 2018
- Total seaborne trade to reach 310 million tonnes

LNG shipping

Chinese coal to LNG switch to be a key driver

China LNG import



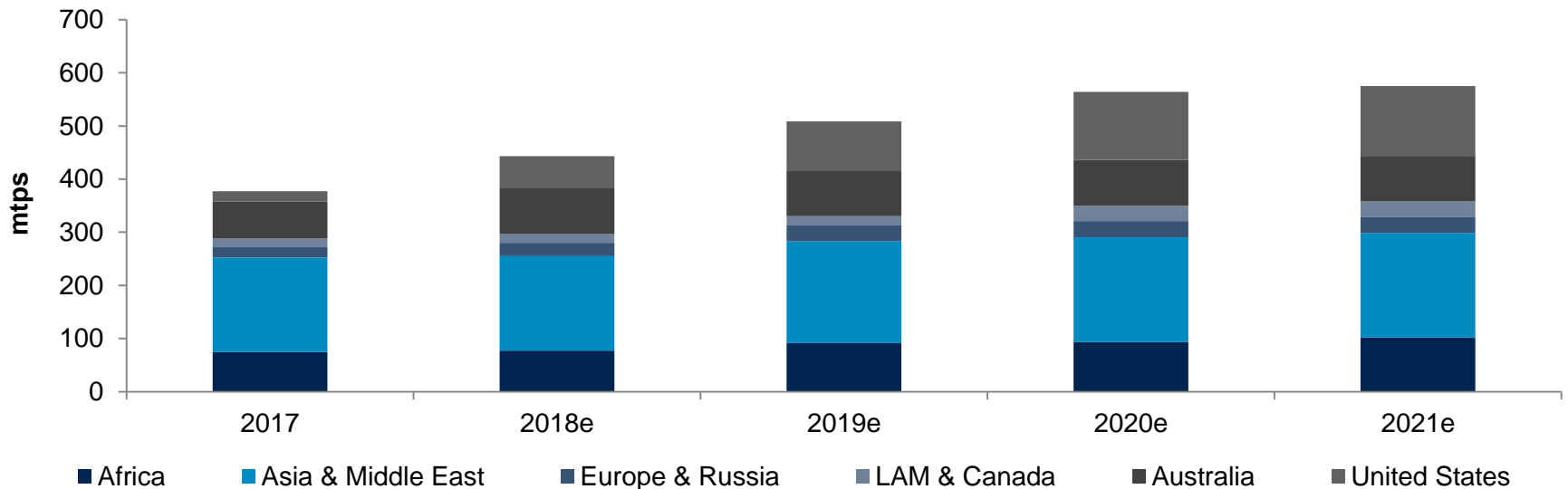
Source: Drewry research

- Government push to switch from coal to LNG
- China expected to become leading importer in five years

LNG shipping

USA and Australia main drivers of export growth

Global liquefaction capacity



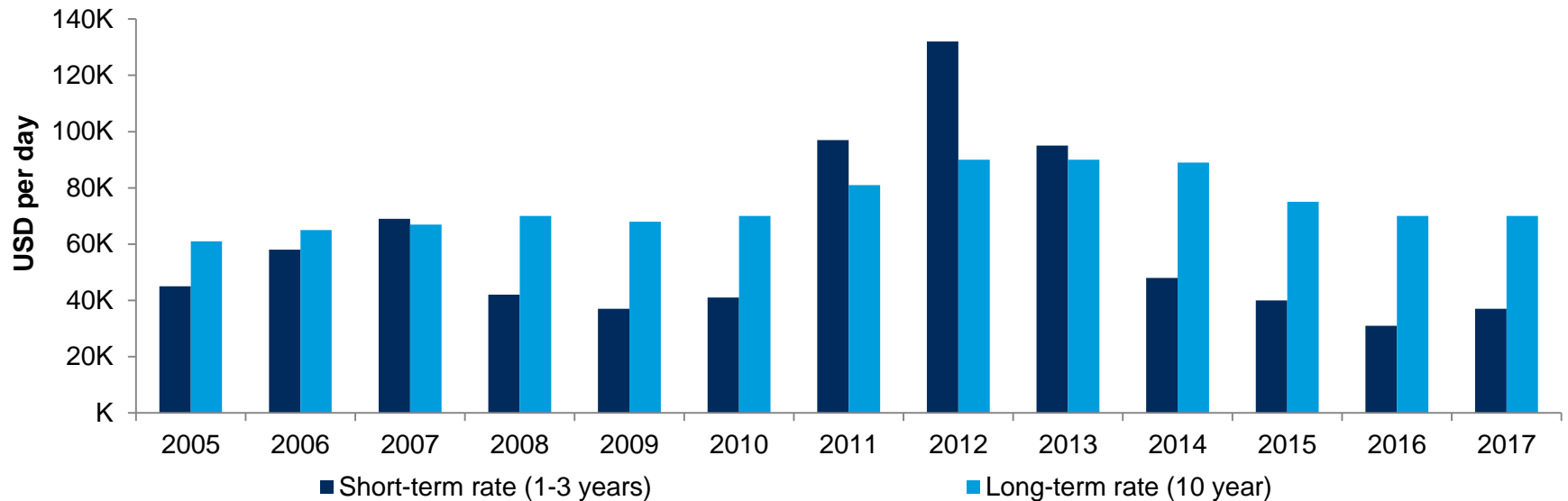
Source: Drewry research

- 16.8m tonnes of new liquefaction capacity to be added in Australia from the Ichthys LNG project and Wheatstone LNG projects.
- 17 MT of new liquefaction capacity to be added in the US from Freeport LNG, Cove Point LNG and Cameron LNG

LNG shipping

Weak freight rate outlook in the short term, though bullish in the long term

Freight rates



Source: Drewry research

- 2018 spot rates expected to follow a similar profile to 2017
- Spot rates should pickup in 2019 as supply pressures ease

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